



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,350	06/02/2006	Takeharu Kuramochi	040356-0590	4987
23428 7590 12/17/2009 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007				
EXAMINER				
MARTIN, ANGELA J				
ART UNIT		PAPER NUMBER		
1795				
MAIL DATE		DELIVERY MODE		
12/17/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/581,350

Applicant(s)

KURAMOCHI ET AL.

Examiner

ANGELA J. MARTIN

Art Unit

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 61-78 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 61-78 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/GS-08)
Paper No(s)/Mail Date 7/9/08; 6/2/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 61-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagayama Kazuhiko, JP 2001-236971, in view of Bevers et al., US 5,761,793. Nagayama teaches a fuel cell manufacturing method for manufacturing a fuel cell, comprising: a process of feeding a polymer electrolyte membrane formed in strip form (abstract; Fig. 1, 2), and a process of positioning and fixing any of a catalyst layer, a gas diffusion layer, and a separator on a surface of the polymer electrolyte membrane (0005; 0008) .

The fuel cell manufacturing method as defined in Claim 61, wherein the polymer electrolyte membrane comprises a catalyst layer formed in advance on a surface thereof (0009) .

The fuel cell manufacturing method as defined in Claim 62, wherein the positioning and fixing process comprises: a process of adhering the gas diffusion layer to the catalyst layer; and a process of adhering the separator to the gas diffusion layer adhered to the catalyst layer (0008-0009).

The fuel cell manufacturing method as defined in Claim 65, wherein the gas diffusion layer adhering process to the catalyst layer comprises: a process of pressing the gas diffusion layer, which is coated with a polymer electrolyte liquid, against the catalyst layer to temporarily fix the gas diffusion layer to the catalyst layer; and a process of applying thermal compression to the catalyst layer and the gas diffusion layer to adhere the gas diffusion layer to the catalyst layer (0008-0009).

The fuel cell manufacturing method as defined in Claim 65, wherein the gas diffusion layer adhering process to the catalyst layer comprises: a process of coating the separator with a sealing agent; a process of pressing the separator coated with the sealing agent against the gas diffusion layer; and a process of subjecting the sealing agent to thermal drying with the separator pressed against the gas diffusion layer (0012).

Nagayama does not teach conveyance holes, a sensor to detect a displacement speed, positioning marks, controlling rotation speed of conveyance roller, protective sheet on the polymer electrolyte membrane, process for peeling protective sheet away from membrane prior to positioning and fixing mechanism.

However, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made because although the prior art of record does not recite positioning marks and controlling rotation speed of conveyance roller, these are known in the normal operation of a conveyance roller.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bevers et al., US 5,761,793, teach a process for the production of a composite consisting of electrode material, catalyst material and a solid electrolyte membrane.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANGELA J. MARTIN whose telephone number is (571)272-1288. The examiner can normally be reached on Monday-Friday from 10:00 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dah-Wei Yuan can be reached on 571-272-1295. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AJM
/Angela J. Martin/
Examiner, Art Unit 1795